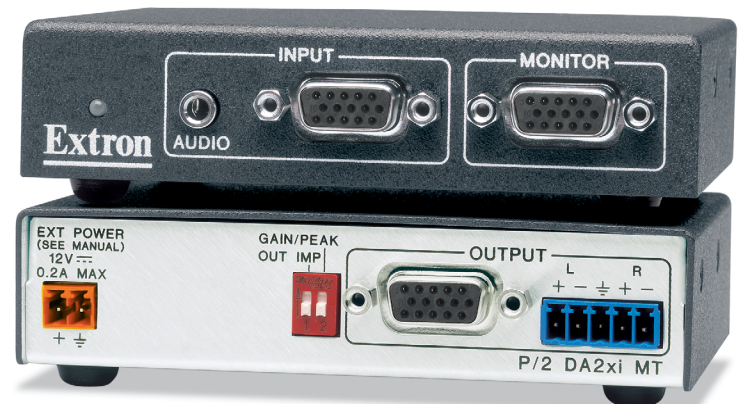## Distribution Amplifier

P/2 DA2xi MT

Two Output VGA and Audio
Distribution Amplifier

Extron Electronics

INTERFACING, SWITCHING AND CONTROL

Safety Instructions

Safety Instructions • English

WARNING: This symbol, ⚠, when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

ATTENTION: This symbol, ⚠, when used on the product, is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the Extron Safety and Regulatory Compliance Guide, part number 68-290-01, on the Extron website, **www.extron.com**.

Instructions de sécurité • Français

AVERTISSEMENT: Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur la présence à l'intérieur du boîtier du produit d'une tension électrique dangereuse susceptible de provoquer un choc électrique.

ATTENTION: Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur des instructions d'utilisation ou de maintenance importantes qui se trouvent dans la documentation fournie avec le matériel.

Pour en savoir plus sur les règles de sécurité, la conformité à la réglementation, la compatibilité EMI/EMF, l'accessibilité, et autres sujets connexes, lisez les informations de sécurité et de conformité Extron, réf. 68-290-01, sur le site Extron, **www.extron.fr**.

Sicherheitsanweisungen • Deutsch

WARNUNG: Dieses Symbol ⚠ auf dem Produkt soll den Benutzer darauf aufmerksam machen, dass im Inneren des Gehäuses dieses Produktes gefährliche Spannungen herrschen, die nicht isoliert sind und die einen elektrischen Schlag verursachen können.

VORSICHT: Dieses Symbol ⚠ auf dem Produkt soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.

Weitere Informationen über die Sicherheitsrichtlinien, Produkthandhabung, EMI/EMF-Kompatibilität, Zugänglichkeit und verwandte Themen finden Sie in den Extron-Richtlinien für Sicherheit und Handhabung (Artikelnummer 68-290-01) auf der Extron-Website, **www.extron.de**.

Instrucciones de seguridad • Español

ADVERTENCIA: Este símbolo, ⚠, cuando se utiliza en el producto, avisa al usuario de la presencia de voltaje peligroso sin aislar dentro del producto, lo que puede representar un riesgo de descarga eléctrica.

ATENCIÓN: Este símbolo, ⚠, cuando se utiliza en el producto, avisa al usuario de la presencia de importantes instrucciones de uso y mantenimiento recogidas en la documentación proporcionada con el equipo.

Para obtener información sobre directrices de seguridad, cumplimiento de normativas, compatibilidad electromagnética, accesibilidad y temas relacionados, consulte la Guía de cumplimiento de normativas y seguridad de Extron, referencia 68-290-01, en el sitio Web de Extron, **www.extron.es**.

Chinese Simplified (简体中文)

警告: ⚠产品上的这个标志意在警告用户该产品机壳内有暴露的危险电压, 有触电危险。

注意: ⚠ 产品上的这个标志意在提示用户设备随附的用户手册中有重要的操作和维护(维修) 说明。

关于我们产品的安全指南、遵循的规范、EMI/EMF 的兼容性、无障碍使用的特性等相关内容, 敬请访问 Extron 网站 **www.extron.com**, 参见 Extron 安全规范指南, 产品编号 68-290-01。

Chinese Traditional (繁體中文)

警告: ⚠若產品上使用此符號, 是為了提醒使用者, 產品機殼內存在著可能會導致觸電之風險的未絕緣危險電壓。

注意 ⚠ 若產品上使用此符號, 是為了提醒使用者。

有關安全性指導方針、法規遵守、EMI/EMF 相容性、存取範圍和相關主題的詳細資訊, 請瀏覽 Extron 網站: **www.extron.com**, 然後參閱《Extron 安全性與法規遵守手冊》, 準則編號 68-290-01。

Japanese

警告: この記号 ⚠ が製品上に表示されている場合は、筐体内に絶縁されていない高電圧が流れ、感電の危険があることを示しています。

注意: この記号 ⚠ が製品上に表示されている場合は、本機の取扱説明書に記載されている重要な操作と保守(整備)の指示についてユーザーの**注意**を喚起するものです。

安全上のご注意、法規厳守、EMI/EMF適合性、その他の関連項目については、エクストロンのウェブサイト**www.extron.com**より『Extron Safety and Regulatory Compliance Guide』(P/N 68-290-01) をご覧ください。

Korean

경고: 이 기호 ⚠, 가 제품에 사용될 경우, 제품의 인클로저 내에 있는 접지되지 않은 위험한 전류로 인해 사용자가 감전될 위험이 있음을 경고합니다.

주의: 이 기호 ⚠, 가 제품에 사용될 경우, 장비와 함께 제공된 책자에 나와 있는 주요 운영 및 유지보수(정비) 지침을 경고합니다.

안전 가이드라인, 규제 준수, EMI/EMF 호환성, 접근성, 그리고 관련 항목에 대한 자세한 내용은 Extron 웹 사이트(**www.extron.com**)의 Extron 안전 및 규제 준수 안내서, 68-290-01 조항을 참조하십시오.

FCC Class A Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. The Class A limits provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference; the user must correct the interference at his own expense.

> **NOTE:** This unit was tested with shielded I/O cables on the peripheral devices. Shielded cables must be used to ensure compliance with FCC emissions limits.
>
> For more information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the "**Extron Safety and Regulatory Compliance Guide**" on the Extron website.

Specifications Availability

Product specifications are available on the Extron website, **www.extron.com**.

Conventions Used in this Guide

Notifications

The following notifications are used in this guide:

> **WARNING:** A warning indicates a situation that has the **potential** to result in death or severe injury.

> **CAUTION:** A caution indicates a situation that **may** result in minor injury.

> **ATTENTION:** Attention indicates a situation that may damage or destroy the product or associated equipment.

> **NOTE:** A note draws attention to important information.

Contents

Introduction

The Extron P/2 DA2xi MT is a distribution amplifier that accepts video input from a VGA, XGA, UXGA, or QXGA compatible PC and distributes the signal to separately buffered outputs. The output on the back of the unit can be extended with Extron VGA Series cables from 6 feet to 250 feet in length. The MT model also has audio input and output.

Features

- **Power and Signal LED** — Green LED = power + signal. Amber LED = power but no signal. Off = no power.
- **Gain and Peak DIP switch** — Use this feature to compensate for longer cable runs.
- **Out Imp DIP switch** — Changes the output impedance to be compatible with all projectors.
- **Cable retention chain** — The input cable can be secured to the unit with the supplied chain (attached to the right standoff nut of the input VGA connector) to prevent the cable from being lost or misplaced.
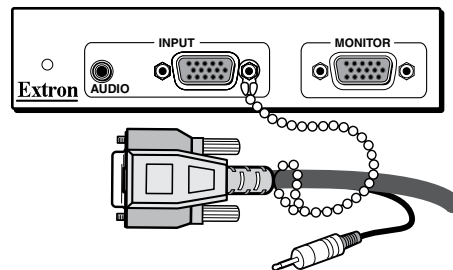

Figure 1.   P/2 DA2xi MT Distribution Amplifier

Installation

The Installation section describes:

- **Connectors, Indicators, and Controls**
- **Mounting**

Connectors, Indicators, and Controls

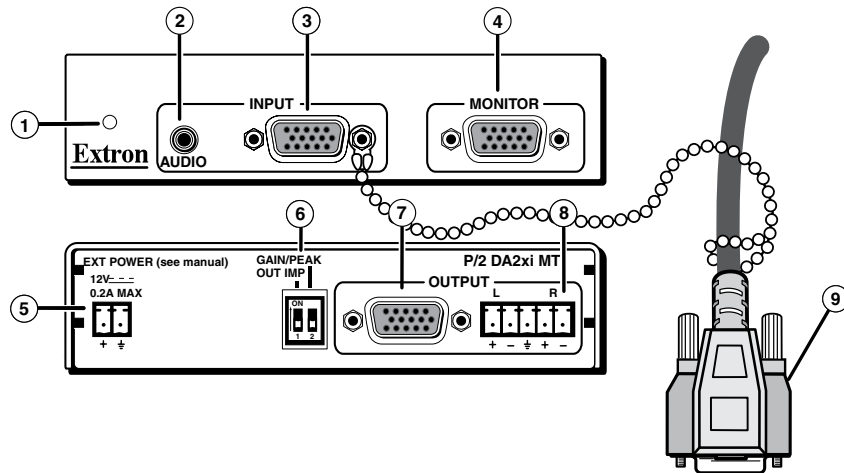The front and rear panels of the P/2 DA2xi MT are described below.

Figure 2.   Front and Rear Panels

① **Power and Signal indicator LED** — When lit green, this LED indicates that the distribution amplifier is receiving both power and a computer signal. When lit amber, it indicates that the distribution amplifier is receiving power but no computer signal.

② **Audio input connector** — Plug a 3.5 mm, mini plug audio cable from the sound card of a computer into this jack.

③ **Video input connector** — Connect the VGA-QXGA output of a computer to this connector.

④ **Monitor connector** — Connect a local monitor to this connector.

⑤ **Power connector** — Plug the external 12 V power supply, only when needed (see "Power and Signal indicator LED" on page 2), into this 2-pole captive screw connector. The included power supply is shipped with a plug installed. If you need to cut the DC output cord to a different length and reinstall the plug, refer to the following figure and notes.
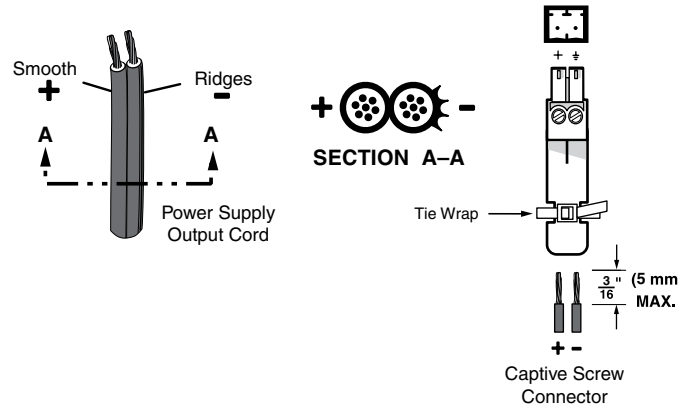

Figure 3. Power Connector Wiring

ATTENTION: Potential Damage to Property.

- Always use a power supply provided by or specified by Extron. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the end product.

- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities. The power supply is to be located within the same vicinity as the Extron AV processing equipment in an ordinary location, Pollution Degree 2, secured to the equipment rack within the dedicated closet, podium or desk.

- The installation must always be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 75 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to building structure or similar structure.

- When you connect the power supply, voltage polarity is extremely important. Applying power with incorrect voltage polarity could damage the power supply and the amplifier. Identify the power cord negative lead by the ridges on the side of the cord.
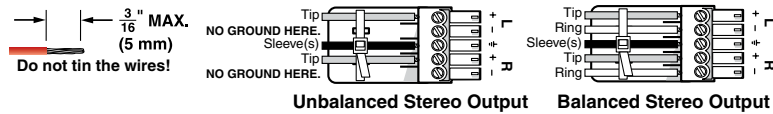
NOTE: Do not tin the stripped power supply leads before installing the captive screw connector. Tinned wires are not as secure in the connectors and could pull out. Strip the power cord jacket 5 mm from the end.

CAUTION: Possible Electric Shock.
The two power cord wires must be kept separate while the power supply is plugged in. Remove power before continuing.

To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.

⑥ **Two-bank DIP switches** — These switches affect only the video output (⑦), not the "monitor" output (④). The **Gain/Peak** DIP switch should be on (up) when the output cable is over 100 feet (30.5 m). The **Out Imp** DIP switch changes output impedance. If all connections and operations are correct, but the output device has no picture, switch to the other position.

⑦ **Video output connector** — Connect the video output device (projector, display panel, or monitor) to this connector.

⑧ **Audio output connector** — Wire a 3.5 mm 5-pole captive screw audio connector as shown below, and plug it into this connector. Connect the other end of the cable to an audio output device or recorder.

Unbalanced Stereo Output   **Balanced Stereo Output**

> **ATTENTION:**   **Potential Damage to Property.**
> Connect the sleeve to ground (Gnd). Connecting the sleeve to a negative (-) terminal will damage the audio output circuits.

⑨ **Local monitor cable assembly** — Use this cable assembly to connect the local monitor (video) and speaker (audio) to the unit. The chain is used to attach the cable to the unit, to prevent the cable from being lost or misplaced.

Mounting

> **WARNING:** **May result in serious injury**.
> Installation and service must be performed by authorized personnel only (see **UL rack mounting guidelines** below.

The P/2 DA2xi MT can be mounted on a rack shelf, under a desk or tabletop, or on a projector bracket.

UL rack mounting guidelines

The following Underwriters Laboratories (UL) guidelines pertain to the safe installation of the equipment in a rack.

1. **Elevated operating ambient temperature** — If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, install the unit in an environment compatible with the maximum ambient temperature (Tma = +122 °F, +50 °C) specified by Extron.

2. **Reduced air flow** — Install the equipment in a rack so that the amount of air flow required for safe operation of the equipment is not compromised.

3. **Mechanical loading** — Mount the equipment in the rack so that a hazardous condition is not achieved due to uneven mechanical loading.

4. **Circuit overloading** — Connect the equipment to the supply circuit and consider the effect that circuit overloading might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

5. **Reliable earthing (grounding)** — Maintain reliable grounding of rack-mounted equipment. Pay particular attention to supply connections other than direct connections to the branch circuit (that is, use of power strips).

Rack mounting

For optional rack mounting, mount the P/2 DA2xi MT on a19-inch, 1U RSF 123 rack shelf kit (part #**60-190-20**), a universal RSU 126 1U 6-inch deep rack shelf kit (part #**60-190-10**), or a universal RSU 129 1U 9.5-inch deep rack shelf kit (part #**60-190-01**), as shown below.

1. Remove the rubber feet (if installed) and mount the unit on the rack shelf, using two screws in opposite (diagonal) corners.

2. Install blank panels or other units to the rack shelf, as required.

3. Insert the shelf into the rack, and secure the shelf to the rack using the supplied machine screws.
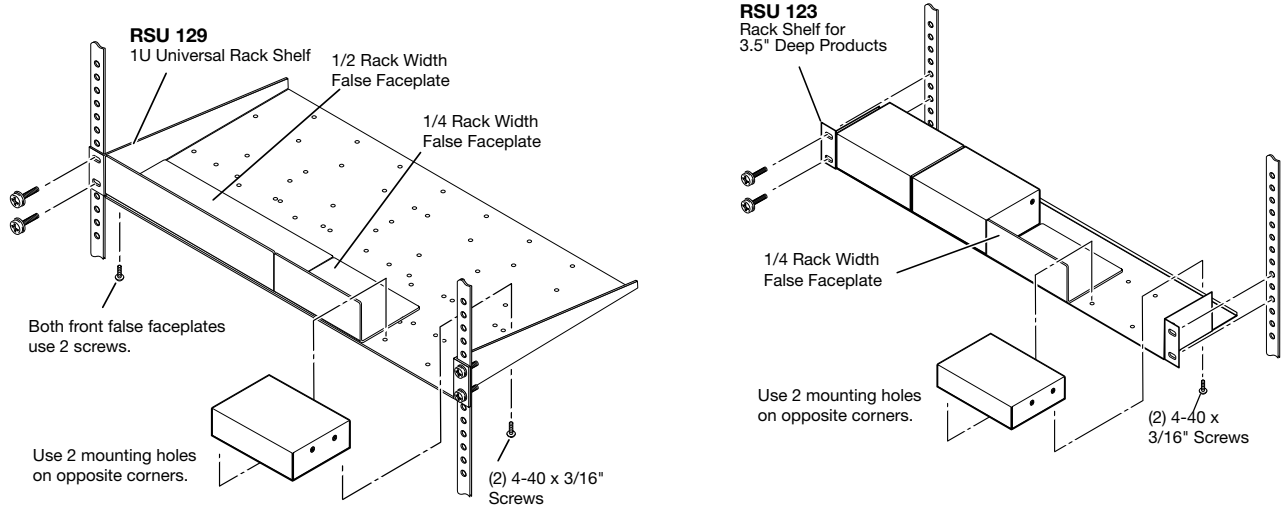

Figure 4.   Rack Mounting Options

Furniture mounting

For optional furniture mounting, mount the unit using the mounting kit MBU 125 (part #**70-077-01**, provided with the P/2 DA2xi MT) as follows:

1. Attach the mounting brackets to the distribution amplifier with the provided machine screws, as shown below.
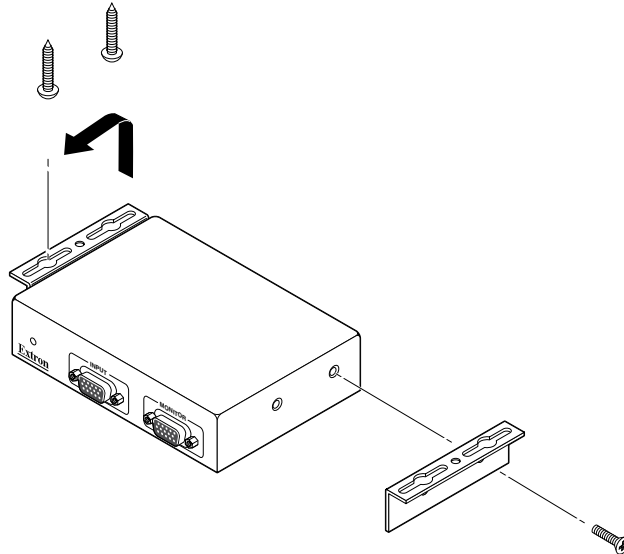

Figure 5.   Furniture Mounting Option

2. If feet were previously installed on the bottom of the unit, remove them.
3. Hold the unit with the attached brackets against the underside of the table or other furniture. Mark the location of the screw holes of the bracket on the mounting surface.
4. Drill 3/32 inch (2 mm) diameter pilot holes, 1/4 inch (6.3 mm) deep in the mounting surface at the marked screw locations.
5. Insert #8 wood screws into the four pilot holes. Tighten each screw into the mounting surface until just less than 1/4 inch of the screw head protrudes.
6. Align the mounting screws with the slots in the brackets and place the unit against the surface, with the screws through the bracket slots.
7. Slide the unit slightly forward or back, then tighten all four screws to secure the unit in place.

Reference Information

Included Parts

Included parts	Replacement part number
P/2 DA2xi MT	60-506-21
MBU 125 1U, 1/2 rack width under-desk mount kit	70-077-01
VGA-A M-M MD/6 6-foot 15-pin HD male-to-male VGA cable with audio	26-490-02
P/2 DA2xi MT Setup Guide	

Other Accessories

Description	Part number
RSF 123 1U, 3.5" deep rack shelf kit	60-190-20
RSU 126 1U, 6" D universal rack shelf kit	60-190-10
RSU 129 1U, 9.5" deep universal rack shelf	60-190-01

Extron Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America,
and Central America:
Extron Electronics
1230 South Lewis Street
Anaheim, CA 92805
U.S.A.

Europe and Africa:
Extron Europe
Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

Asia:
Extron Asia
135 Joo Seng Road, #04-01
PM Industrial Bldg.
Singapore 368363
Singapore

Japan:
Extron Electronics, Japan
Kyodo Building, 16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

China:
Extron China
686 Ronghua Road
Songjiang District
Shanghai 201611
China

Middle East:
Extron Middle East
Dubai Airport Free Zone
F12, PO Box 293666
United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or if modifications were made to the product that were not authorized by Extron.

> **NOTE:** If a product is defective, please call Extron and ask for an Application Engineer to receive an RA (Return Authorization) number. This will begin the repair process.
>
> **USA**: 714.491.1500 or 800.633.9876   **Europe**: 31.33.453.4040
> **Asia**: 65.6383.4400   **Japan**: 81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.